

In re Application of:  
Grotendorst and Neff  
Application No. 09/461,646  
Filed: December 14, 1999  
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Attorney Docket No.: FIBRO1130-2

**REMARKS**

Justification for the amendments is as follows. Applicants have cancelled claims 1-4 and 6-14 without prejudice to renewal. Applicants specifically retain the right to prosecute the subject matter of these claims in continuing applications. Amendments to claims 15 and 18 were made to comply with requirements expressly set forth in the previous Office Action. These amendments were not presented earlier because Applicants believed the claims as previously amended were patentable. No new matter has been added by any of the amendments and entry of the amendments is respectfully requested. Attached hereto is a marked-up version of the changes made by the present amendment. The attached page is captioned "Version with markings to show changes made."

I. Objection to Claims 2-4 under 37 C.F.R. §1.75(c)

The Examiner objected to claims 2-4 under 37 C.F.R. §1.75(c) as being of improper dependent form for failing to further limit the subject matter of the previous claim. Claims 2-4 are cancelled above without prejudice. Therefore, the objection to claims 2-4 under 37 C.F.R. §1.75(c) is moot.

II. Rejection of Claims 2 and 18 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph

The Examiner rejected claims 2 and 18 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph. Claim 2 is cancelled above and the basis for rejection is thus moot. With respect to claim 18, the Examiner stated "claim 18 is indefinite because polynucleotides cannot be cultured." (Office Action, page 3, line 7.)

Claim 18 has been amended to depend from claim 17 and contains the step "culturing the host cell" instead of "culturing the polynucleotide." Applicants believe that amended claim 18 is clear and definite. Therefore, Applicants respectfully request withdrawal of the rejection of claims 2 and 18 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph.

III. Rejection of Claims 3, 5, and 15-18 under 35 U.S.C. §102(b)

The Examiner maintained the rejection of claims 3 and 5, and newly rejected claims 15-18, under 35 U.S.C. §102(b) as being anticipated by Brigstock et al., U.S. Patent No. 5,876,730. The Examiner stated the rejection is "for reasons cited in the previous Office Action, mailed

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10/23/01, at page(s) 4," and that "HBGF as disclosed by Brigstock is residues 247 or 248 to the terminus of SEQ ID NO:2 of this application, which is a fragment of (b) of claim 15, as recited in part (d) of that claim."(Office Action, page 3, lines 21-22 and 25-26.)

Claim 3 is cancelled above and the rejection is therefore moot as to this claim. Furthermore, claim 15 as amended above recites "an amino acid sequence selected from the group consisting of SEQ ID NO:4, residue 75 through 172 of SEQ ID NO:4; and residue 4 through 172 of SEQ ID NO:4," and does not relate to "HBGF as disclosed by Brigstock." Thus, Brigstock et al. does not anticipate amended claim 15 or claims 5 and 16-18 which depend directly or indirectly therefrom. As claims 5 and 15-18 are not anticipated by Brigstock et al. and claim 3 is cancelled, Applicants respectfully request withdrawal of the rejection of these claims under 35 U.S.C. §102(b) as being anticipated by this reference.

IV. Rejection of Claims 1, 5, and 15-18 Under 35 U.S.C. §102(b)

The Examiner maintained the rejection of claims 1 and 5, and newly rejected claims 15-18, under 35 U.S.C. §102(b) as being anticipated by Grotendorst et al., U.S. Patent No. 5,408,040. The Examiner stated that Applicants' argument, as presented in the amendment filed on 23 April 2002, that the present invention is directed toward a unique group of fragments not delineated by Grotendorst et al. was not persuasive because

there are no functional or structural limitations to delineate the claimed invention from the fragments of Grotendorst, all of which would "not consist of SEQ ID NO:2" of this application, and a majority of which would comprise at least a fragment of residues 4-74 or 75-172 of SEQ ID NO:4, as Grotendorst envisions functional fragments, which would inherently comprise at least exon 5, which is the portion of the molecule (as identified by Brigstock) with mitogenic acitivity.

(Office Action, page 4, lines 6-11.)

Applicants maintain their position as stated in the previous amendment. The CTGF fragments are a unique subset not delineated by Grotendorst et al. that stimulate mitogenic activity. However, in order to expedite prosecution of the allowable subject matter, Applicants have cancelled claim 1 above without

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prejudice to its renewal, and amended claim 15 above to recite specific fragments having structural limitations not identified by Grotendorst et al. Therefore, Grotendorst et al. does not anticipate amended claim 15 or claims 5 and 16-18 which depend directly or indirectly therefrom. Applicants thus respectfully request withdrawal of the rejection of claims 1, 5 and 15-18 under 35 U.S.C. §102(b) as being anticipated by Grotendorst et al.

Rejection of Claims 2-4 Under 35 U.S.C. §103(a)

The Examiner maintained the rejection of claims 2-4 under 35 U.S.C. §103(a) as being unpatentable over Grotendorst et al., U.S. Patent No. 5,408,040, in view of Brigstock et al., U.S. Patent No. 5,876,730. Specifically, the Examiner stated the claims are not found "to be directed to any specific fragments, as all three claims either state 'of a fragment thereof' or 'comprising'." (Office Action, page 4, line 32, to page 5, line 1.)

Claims 2-4 have been cancelled above without prejudice to their renewal, and this rejection is therefore moot.

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### CONCLUSION

In view of the foregoing, Applicants submit that the claims are fully in condition for allowance and request early notification to that effect.

Applicants believe that no fee is due with this communication. If, however, the Commissioner determines that a fee is due, the Commissioner is hereby authorized to charge any necessary fees to Deposit Account No. **50-1355**. **This form is enclosed in duplicate.**

If the Examiner would like to discuss any of the issues raised in the Office Action, Applicant's representative can be reached at (858) 677-1456. Please charge any additional fees, or make any credits, to Deposit Account No. 50-1355.

Respectfully submitted,

  
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**Version with markings to show changes made**

**IN THE CLAIMS:**

Claims 1-4 and 6-14 have been cancelled without prejudice.

Claims 15 and 18 have been amended as follows.

15. (Once Amended) An isolated polypeptide having mitogenic activity and consisting essentially of an amino acid sequence selected from the group consisting of:

- (a) [an amino acid sequence comprising] SEQ ID NO:4;
- (b) [an amino acid sequence comprising residue 4 through 74 of SEQ ID NO:4;
- (c) an amino acid sequence consisting of] residue 75 through 172 of SEQ ID NO:4; and
- [(d) a fragment of (b) or (c);
- (e) an amino acid sequence comprising residue 4 through 74 of SEQ ID NO:4 and a portion of residue 75 through 172 of SEQ ID NO:4; and
- (f)] (c) [an amino acid sequence comprising] residue 4 through 172 of SEQ ID NO:4[;

wherein the polypeptide has mitogenic activity and does not consist of SEQ ID NO:2].

18. (Once Amended) A method of producing a polypeptide, the method comprising:

- (a) culturing the host cell [polynucleotide] of claim 17 [5] under conditions suitable for formation of the polypeptide; and
- (b) recovering the polypeptide.